Every Drop is Beautiful Save Water. Nothing Can Replace It.

The City of Arlington's conservation program is part of a regional effort to help plan for future water supply needs and meet the requirements of the Texas Commission on Environmental Quality and Texas Water Development Board. With reservoir levels decreasing and water capacity below normal, the City of Arlington is asking residents and businesses to comply with City ordinances and use water wisely. The City of Arlington appreciates your commitment to conserving water and we encourage you to save water and money by changing your water use habits today. For more water conservation tips, visit www.saveArlingtonWater.com.

Why do I see water being discharged from the fire hydrants?

The practice of opening a fire hydrant and letting the water run for several minutes is known as



flushing. This practice improves water quality and ensures you are getting the freshest, highest quality water to your home. Build-up of sediment can occur in pipelines and flushing

can help minimize any discoloration or sediment in your water. If you notice sediment or discoloration in your water, try letting the tap run for several minutes. If this does not clear up the issue, please notify the water department.

Arlington wins best tasting water in Texas

In March 2015, Arlington won Best Tasting Surface Water in Texas at the Texas Water Utilities Association's annual school contest.

Arlington also won Best



Tasting Surface Water in May 2014 at the TWUA North Central Texas Regional contest. Surface water, which is used in Arlington and most urban communities, is water that originates from lakes, rivers and streams.



For more information:

Laboratory Services water sample requests, water quality questions or water quality problems. If you have questions concerning this brochure, ask for the laboratory.

Customer Services:.....817-275-5931

Open new or transfer account, billing inquiries, water conservation, water and sewer rates.

Emergency Water, and

Service interruptions, water leaks, sewer problems

Tarrant Regional Water

District (TRWD):817-237-8585

Texas Commission on Environmental

Quality (TCEQ):.....512-239-1000

To participate in decisions concerning water:

Attend the Arlington City Council meetings, held on the 2^{nd} and 4^{th} Tuesday nights at 6:30 p.m. in the Council Chamber located at City Hall, 101 West Abram Street.

Meeting schedule is posted online at www.arlington-tx.gov/citycouncil/meeting-schedule/

To view City Council Agenda or to watch a City Council meeting webcast, please visit www.arlington-tx.gov/citycouncil/agendas/

Visit our website at:

www.ArlingtonTX.gov/water/CCR

Este informe incluye información importante sobre su agua potable, si necesita ayuda para entender esta información por favor llame al 817-575-8984.

Ban bao cao nay bao gom nhung thong tin can biet ve nuoc uong. Moi chi tiet va thac mac xin lien lac 817-575-8984.

<u>Photography:</u> Front cover, Texas Department of Wildlife; All other photos, City of Arlington staff.

Arlington Water Utilities 2014 Water Quality Report



Arlington's Water treatment plants can produce 172.5 million gallons per day.

THE AMERICAN DREAM CITY

Published May 2015

As you read through this report, you will notice that drinking water produced by Arlington Water Utilities meets or exceeds all Federal and State drinking water quality regulations. Substances found in Arlington water are well below the maximum allowable levels. The information included in this report reflects the data collected from January 1 through December 31, 2014, unless noted otherwise.



How is Arlington water treated?

The water in Arlington is treated at two state of the art water treatment plants. Ozone is used as the primary disinfectant. Aluminum sulfate and a cationic polymer are added to help dirt and other particles clump together and settle out during treatment. The water is then filtered through granular activated carbon beds to remove smaller particles and substances that are dissolved in the water. The water is then chloraminated (treated with chlorine and

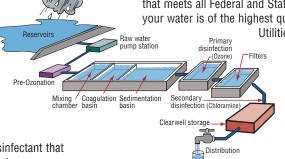
for storage. Chloramine is the secondary disinfectant that keeps the water safe on its way to your faucet.

Is Arlington water safe to drink?

Absolutely. Our employees take great pride in producing and delivering to you, our customer, water that meets all Federal and State regulations. To ensure your water is of the highest quality, Arlington Water

Utilities Laboratory closely
monitors the drinking water
at over 120 distribution
locations throughout the
city. In 2014, the laboratory
collected 5,507 samples
and performed 13,870 tests
monitoring 144 different

analytes.



Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of these constituents does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that

then ammonia) as it enters the clearwell

The Environmental Protection Agency (EPA) Safe Drinking Water Hotline

limit the amount of certain substances in water provided by public water systems. The treatment process removes these substances from the raw water and provides further protection prior to

sending it to the distribution system. More information about contaminants and potential health effects can be obtained by calling

the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800-426-4791 or visiting the EPA website at www.epa.gov/safewater.

Health information for Special Populations

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

General information about lead

Where does lead in drinking water come from? If present, lead is introduced into your drinking water from plumbing fixtures and materials, not from the water source. Although lead was banned from use in pipe and solder in 1986, older homes may still have materials containing lead.

Did You Know...

Drinking water can sometimes appear cloudy or milky when first drawn from the tap. This can be caused by tiny air bubbles that are in the water. This usually happens when it is cold outside because of the solubility of air in water as the water temperature decreases. Once the water comes out of your tap, the water is no longer under pressure and the air comes out of solution as bubbles. Cloudy water at one golf course, one park caused by tiny air bubbles is not harmful to health. An easy way to test whether the cloudiness is caused by air bubbles or something else is to to fill a clear glass with water and let it sit for a minute. If the cloudiness clears from the bottom to the top, then you can be assured that this is air dissipating from your water.

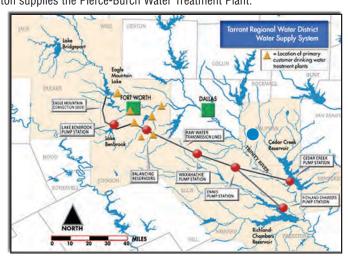
Where does Arlington drinking water come from? Arlington purchases its water for treatment from the Tarrant Regional Water District. The water is taken from four reservoirs. Cedar Creek, Richland-Chambers and Lake Benbrook supply the John F. Kubala Water Treatment Plant. Lake Arlington supplies the Pierce-Burch Water Treatment Plant.

Cryptosporidium Monitoring Information:

In 2014, Tarrant Regional Water District monitored all raw water sources for Cryptosporidium and found none in the source waters servicing Arlington.

Cryptosporidium is a microscopic, disease-causing parasite, housed in a hard-shelled egg-shaped oocyst. When ingested, the oocyst splits open, releasing sporozoites. These sporozoites invade the lining of the gastrointestinal tract and can cause an illness called cryptosporidiosis. Cryptosporidiosis is typically an acute short-term infection but can become severe and non-resolving in children and immuno-compromised individuals.

In addition to coagulation and filtration, Arlington uses Ozone (the primary disinfectant) to further protect against Cryptosporidium.





Just try living without it.

SAVE WATER. Nothing can replace it.

Visit <u>www.SaveArlingtonWater.com</u>. Learn how to do your part in saving our most precious resource – water.

Substances Expected to be in Drinking Water

The City of Arlington and the State of Texas both analyze your drinking water. Any regulated substances that were detected during the last year are shown in Table A. As shown in the table, all are well below the established maximum contaminant levels. All water dissolves substances from the ground as it flows over and through it. Substances that may be present in raw water include such things as:

- microbes such as viruses and bacteria that come from septic systems, agricultural livestock operations and wildlife;
- salts and metals that can be naturally occurring or the result of urban storm water runoff, industrial or domestic wastewater discharges or farming;
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- 3) pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff or residential uses:
- organic chemical substances that include synthetic and volatile organic chemicals that are by-products of industrial processes and can also come from gas stations and urban storm water runoff;

5) radioactive substances that are naturally occurring.

Substances may be found in drinking water that may cause taste, color, or odor problems but are not necessarily causes for health concerns. For more information, please call Laboratory Services at 817-575-8984.





Emerging Water Quality Issues

rlington Water Utilities is committed to protecting Apublic health and meets or surpasses all state and federal health standards for tap water. Under the 1996 amendments to the federal Safe Drinking Water Act, the Environmental Protection Agency (EPA) is required once every five years to issue a new list of up to 30 unregulated contaminants for which water systems must monitor. To help advance the science of drinking water, we have been collecting data for the EPA regarding the occurrence of these compounds in our water supply, which is the first step in determining whether they should be regulated. These compounds include Hexavalent Chromium. Cobalt, Molybdenum, Strontium, Vanadium, Chlorate, 1,4 Dioxane, Perfluorinated Alkyl Acids, several unregulated volatile organic compounds, and several hormones. The presence of a compound does not necessarily equate to a health risk, however the concentration of a compound is a far more important factor in determining whether there are health implications. To learn more about the Unregulated Contaminant Monitoring Rule, visit: www.DrinkTap.org



Table A. Regulated Substances. These substances are regulated or are required to be monitored and were detected in Arlington tap water in 2014. None of the detected substances exceeded the regulated limits.

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Atrazine	ppb	0.12	ND	0.19	3		Runoff from herbicide used on row crops
Barium	ppm	0.055	0.045	0.059	2	2	Erosion of natural deposits
Bromate ³	ppb	<5	<5	<5	10	10	Byproduct of drinking water disinfection
Chloramines ²	ppm	3.5	3.2	3.8	MRDL=4	MRDLG=4	Water additive used to control microbes
Fluoride	ppm	0.61	0.49	0.79	4	4	Water additive promoting strong teeth
Nitrate as Nitrogen	ppm	0.562	0.16	1.170	10	10	Runoff from fertilizers
Nitrite as Nitrogen	ppm	0.016	ND	0.219	1	1	Runoff from fertilizers
Radioactive (2011) Radium 228 Beta/Photon Emitters Gross Alpha Particle Activity	pCi/L pCi/L pCi/L	<1.0 <4.0 <2.0	<1.0 <4.0 <2.0	<1.0 <4.0 <2.0	5 50 15	NA NA NA	Decay of natural, man-made deposits Decay of natural, man-made deposits Decay of natural, man-made deposits
Total Coliform ⁴	%	NA	ND	.55%	5%**	NA	Naturally present in the environment
Total Organic Carbon (TOC) PB Plant (raw) PB Plant (drinking) PB Removal ratio JK Plant (raw) JK Plant (drinking)	ppm ppm remov. ratio ppm ppm	5.9 4.0 0.9 6.5 3.9	5.5 3.7 0.7 5.6 3.5	6.4 4.3 1.2 8.6 4.6			Naturally present in the environment (PB = Pierce-Burch Plant) (JK = John F. Kubala Plant)
JK Removal ratio⁵	remov. ratio	1.1	0.8	1.6			
Total Trihalomethanes ²	ppb	14.4	14	15.4	80	NA	By-product of drinking water chlorination
Haloacetic Acids (HAA5) ²	ppb	5.8	5.6	6.1	60	NA	By-product of drinking water chlorination
Turbidity ⁶ Highest single measurement % of samples < 0.3 NTU	NTU %	0.13 99.8%	0.03 NA	0.43 NA	TT=1.0 TT=95%	0 NA	Soil runoff
Substance	Units	Action Level	No. Sites > Action Level		90th %-tile	Range	Possible Source
Copper (2012) ¹	ppm	1.3	(0	0.157	0.003-0.244	Corrosion of household plumbing systems
Lead (2012) ¹	ppb	15	(0	0.0015	ND-0.0057	Corrosion of household plumbing systems

Instead of MCLs for lead and copper, EPA requires that 90 percent of water samples obtained from customers' taps contain less than the Action Level for each metal. Arlington's most recent survey of the required 50 homes shows no home exceeded the action level (sampling required every 3 years.) ²Compliance is based on a calculated local running annual average of all samples at routine sites. ³Compliance is based on a calculated running annual average of the quarterly averages. ⁴Coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected and found in the digestive tract of warm blooded animals. While not themselves disease producers, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms. Therefore their absence from water is a good indication that the water is bacteriologically safe for human consumption. **The MCL for total coliform is the presence of coliform bacteria in 5% or more of the monthly samples. ⁵Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed. Based on running annual average of ratios. TCEQ requires a removal ratio of ≥1.0. ⁶Turbidity has no health effects. However, it can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms that include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.





Table Definitions



Action Level (AL) The concentration

of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

- < (xxx) less than the amount listed.
- ≥ (xxx) equal to or greater than the amount listed.

Maximum Contaminant Level Goal (MCLG) The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL) The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Maximum Residual Disinfectant Level (MRDL) The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

NA Not applicable

ND (Not detected) No level of the parameter was detected.

NE Not established

NTU (Nephelometric Turbidity Units) A unit used when measuring turbidity, a measure of the cloudiness of the water.

pCi/L (picocuries per Liter) A measure of radioactivity in the water.

ppb (parts per billion, ug/L) A unit of measurement roughly equal to 1 drop in 100,000 gallons.

ppm (parts per million, mg/L) A unit of measurement roughly equal to 1 drop in 100 gallons.

TT (Treatment Technique) A required process intended to reduce the level of a contaminant in drinking water.



Table B. Unregulated Substances. These substances are not currently regulated by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether future the contaminants should have a standard.

Substance	Units	Avg.	Min.	Max.	MCL	MCLG	Possible Source
Chloroform	ppb	4.3	3.3	5.3	Not Regulated	NE	
Bromodichloromethane	ppb	4.6	4.4	4.8	Not Regulated	NE	By-product of drinking water disinfection; not regulated
Chlorodibromomethane	ppb	4.1	3.7	4.5	Not Regulated	60	individually; included in Total Trihalomethanes.
Bromoform	ppb	1.4	1.2	1.7	Not Regulated	NE	
Dichloroacetic Acid	ppb	3.76	3.34	4.28	Not Regulated	NE	
Bromoacetic Acid	ppb	0.49	0.36	0.68	Not Regulated	NE	By-product of drinking water disinfection; not regulated individually; included in Haloacetic Acids.
Dibromoacetic Acid	ppb	0.9	0.59	1.12	Not Regulated	NE	
Chloroacetic Acid	ppb	0.56	0.35	0.76	Not Regulated	NE	
Trichloroacetic Acid	ppb	0.05	ND	0.2	Not Regulated	300	
Hexavalent Chromium	ppb	0.01	ND	0.05	Not Regulated	NE	Volatile Organic Compounds are used in many industrial
Bromochloromethane	ppb	0.04	ND	0.12	Not Regulated	NE	processes and found in personal care products
Molybdenum	ppb	1.6	1.39	1.67	Not Regulated	40	Naturally ocurring in rocks and soil
Strontium	ppb	292	260	327	Not Regulated	4000	Naturally ocurring in minerals
Vanadium	daa	1.15	0.75	1.92	Not Regulated	21	Naturally ocurring in many minerals, fossil fuel deposits

